

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TV 34, INC., licensee of Low Power Television Station K48FL in Fort Smith, Arkansas, in support of this amendment to its pending site-change application for Construction Permit BPTTL-20010116AEU, now to specify a new site.

It is proposed to mount a standard SWR directional antenna on the side of an existing 125-meter communications tower. Exhibit B is a map upon which the predicted service contours are plotted. It is important to note that the newly proposed 74 dBu contour encompasses a significant portion of that which obtains from the pending application. Therefore, the changes proposed herein constitute a "minor" change in facilities. Operating parameters for the proposed facility are tabulated in Exhibit C. A contour overlap analysis and interference study are provided in Exhibit D, and a power density calculation follows as Exhibit E.

Because no change in the overall height or location of the existing tower is proposed, the FAA has not been notified of this application. The FCC issued Antenna Structure Registration Number 1063891 to this tower.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.



JEFFREY S. FISHER

May 23, 2003

PROPOSED OPERATING PARAMETERS

PROPOSED K48FL
CHANNEL 48 - FORT SMITH, ARKANSAS
[AMENDMENT TO BPTTL-20010116AEU]

Transmitter Power Output:	1.0 kw
Transmission Line Efficiency:	81.2%
Antenna Power Gain – Toward Horizon:	63.7
Antenna Power Gain – Main Lobe:	63.7
Effective Radiated Power – Toward Horizon:	51.8 kw
Effective Radiated Power – Main Lobe:	51.8 kw
Transmitter Make and Model:	Type-accepted
Rated Output	1.0 kw
Transmission Line Make and Model:	Andrew HJ7-50A
Size and Type:	1-5/8" air heliax
Length:	160 feet
Antenna Make and Model:	SWR SWLP16NCRR/48
Orientation	200 degrees true
Beam Tilt	0.75 degrees
Effective Height Above Ground:	40 meters
Effective Height Above Mean Sea Level:	540 meters

CONTOUR OVERLAP AND
LONGLLEY-RICE INTERFERENCE STUDIES
PROPOSED K48FL
CHANNEL 48 - FORT SMITH, ARKANSAS
[AMENDMENT TO BPTTL-20010116AEU]

We conducted a computer analysis of the interference situation for the proposed facility, the results of which are shown in Exhibit D-2. The study is based on contour protection requirements of Sections 74.705, 74.706, and 74.707 of the FCC's Rules with respect to analog full-power, digital full-power, and low power television stations, respectively. It concludes that the facility proposed herein meets these requirements except in two instances: KWHB (CP) on Channel 47 in Tulsa, Oklahoma; and KWHB-DT (STA) on Channel 48 in Tulsa, Oklahoma.

We then conducted detailed interference studies using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to the two Tulsa facilities. The software utilizes a 2-square kilometer cell size, calculates signal strength at 1.0 kilometer increments along each radial studied, and employs the 1990 U.S. Census to count population within cells. In addition, the program does not attribute interference to the proposed facility in cells within the protected contour of the station under study where interference from another source (other than the proposed K48FL facility) already is predicted to exist (also known as "masking"). The results of these studies are provided in Exhibit D-3. They conclude that the facility proposed herein causes no significant new interference to either KWHB (CP) or KWHB-DT (STA).

As a result, waivers of Sections 74.705 and 74.706 of the Commission's Rules with respect to interference to KWHB (CP) and KWHB-DT (STA), respectively, are requested and believed to be justified based on the aforementioned Longley-Rice studies.

SMITH AND FISHER

EXHIBIT D-2

PROPOSED K48FL
FORT SMITH

REFERENCE

35 40 09 N
94 48 42 W

LPTV Pwr = 51.8 kW, HAMS L COR= 540 M

DISPLAY DATES

DATA 05-10-03
SEARCH 05-23-03

..... Channel 48-, 674 MHz

Call	Channel	Location	Dist	Azi	FCC	Margin
KWHB-D*ST	48	Tulsa	OK 105.03	293.2	> 232.57	-122.42
KWHB* CP	47Z	Tulsa	OK 87.26	296.9	> 112.73	-1.70
NEW* AP	48Z	Mcalister	OK 112.56	227.1	> 103.58	8.98
NEW* AP	48Z	Mcalister	OK 112.56	227.1	> 103.58	8.98
KWHB* LI	47Z	Tulsa	OK 87.26	296.9	> 101.24	11.80
KWBSTV*CP	34+	Eureka Springs	AR 114.23	41.0	> 076.95	37.80
KGEB-D*CP	49	Tulsa	OK 111.13	292.3	> 073.14	37.99
KWBSTV LI	34+	Eureka Springs	AR 114.23	41.0	> 074.69	39.54
K62DQ CP	47+	Fayetteville, Et	AR 77.40	46.4	> 037.13	40.27
K33FG* LI	33Z	Siloam Springs	AR 59.88	26.4	> 024.31	41.01
KELF-L*CPM	48+	Grove	OK 111.18	2.3	> 068.88	42.30
KGEB-D*ST	49	Tulsa	OK 111.13	292.3	> 068.16	42.97
K30EC* AP	48-	Oklahoma City	OK 247.85	260.9	> 195.95	52.98
KFAA LI	51-	Rogers	AR 87.36	46.9	> 032.00	55.36
K53GB CPM	49Z	Paris	AR 116.96	118.4	> 061.35	55.61
K52FJ CP	33Z	Fort Smith	AR 116.89	99.3	> 047.04	69.85
AL8612 AL	45+	Grove	OK 102.61	2.0	> 032.00	70.61

* Actual radials antenna height and directional patterns used (if any)

INTERFERENCE SUMMARY

PROPOSED K48FL
CHANNEL 48 - FORT SMITH, ARKANSAS
[AMENDMENT TO BPTTL-20010116AEU]

<u>Call Sign</u>	<u>Status</u>	<u>City, State</u>	<u>Ch.</u>	<u>Longley-Rice Grade B Population</u>	<u>Unmasked Interference From Proposed Facility</u>	<u>%</u>
KWHB(TV) BPCT-19960702KF	CP	Tulsa, OK	47	968,903	190	< 0.1
KWHB-DT BDSTA-20030113ACX	STA	Tulsa, OK	48	622,975	32	< 0.1